

CLAIMS

1. A recording medium to/from which data can be written/read by a data processing apparatus, comprising:

5 a host interface operable to communicate with the data processing apparatus;

a data storage section having plural recording regions for storing data; and

10 a region information storage section for storing information about each recording region of the data storage section, wherein the region information storage section stores information about address attribute of each recording region of the data storage section.

15 2. The recording medium according to claim 1, wherein the address attribute is a unit of address specified from the data processing apparatus for access to the recording region of the recording medium.

20 3. The recording medium according to claim 2, wherein the unit of address is sector or byte.

25 4. The recording medium according to claim 2, further comprising a controller operable to receive a command for instructing writing or reading of data from the data processing apparatus by way of the host interface, and when the received command specifies an address indicating the access region, judge unit of the address specified by the received command, on the basis of the address attribute stored in the region information storage section.

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5. The recording medium according to claim 1, wherein data stored in each recording region is managed by the file system corresponding to each recording region.

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6. The recording medium according to claim 1, wherein the region information storage section further stores information about type of command set of the command received in the host interface.

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7. The recording medium according to claim 1, wherein the region information storage section further stores information about type of format of the command received in the host interface.

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8. The recording medium according to claim 1, further comprising a controller operable to receive, from the data processing apparatus by way of the host interface, a command for setting an accessible recording region in the data storage section from the data processing apparatus, set an accessible region in the region information storage section according to the received command when the received command specifies the address attribute of the recording region set to be accessible, and change the address attribute of the accessible region set.

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9. The recording medium according to claim 1, further comprising a controller operable to, when receiving a command for changing size of recording region in the data storage section through the host interface from the data processing apparatus, change size of recording region according to the received command, determine the address attribute of the changed recording region according to the changed size of the recording region, and update

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the region information storage section using the determined address attribute.

10. A control method of a recording medium having a data storage region for storing data, the data storage region accessible from outside for writing and reading data, the control method comprising:

5 dividing the data storage region of the recording medium into plural recording regions; and

10 storing region information which is information about each divided recording region to a predetermined region in the recording medium,

15 wherein the region information includes information about address attribute of each recording region.

11. The control method according to claim 10, wherein the address attribute is a unit of address specified for access to the recording region of the recording medium.

20 12. The control method according to claim 10, wherein the unit of address is sector or byte.

13. The control method according to claim 11, further comprising:

25 receiving a command for instructing writing or reading of data, with an address showing access range specified in the command; and

30 judging unit of the address specified by the received command, on the basis of the stored address attribute, to specify the access range.

14. The control method according to claim 10, wherein data stored in each recording region is managed by the file system corresponding to each recording region.

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15. The control method according to claim 10, wherein the region information further stores information about type of command set of the received command.

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16. The control method according to claim 10, wherein the region information further stores information about type of format of the received command.

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17. The control method according to claim 10, wherein the region information includes information of a recording region accessible from outside, and the control method further comprises:

receiving a command for setting a recording region accessible from outside, the command specifying the address attribute of the accessible recording region, and

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in the region information, setting the accessible recording region and changing the information about the address attribute of the accessible recording region set, according to the received command.

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18. The control method according to claim 10, wherein the region information further includes size of each recording region, and the control method further comprises:

receiving a command for changing size of recording region of the recording medium;

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changing the size of recording region according to the

received command; and

determining the address attribute of the changed recording region according to the changed size of recording region, and updating the region information using the determined address attribute.